

**Notice of Allowability**

Application No.

10/765,848

Examiner

Shelly A. Chase

Applicant(s)

KOJIMA, TADASHI

Art Unit

2133

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 1-29-2004.
2. ☒ The allowed claim(s) is/are 25 to 32 (renumbered as claims 1 to 8).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/804,242.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 1-04 & 4-04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
**SHELLY CHASE**  
**PRIMARY EXAMINER**

### **DETAILED ACTION**

1. Claims 1 to 24 are presented for examination. The preliminary amendment filed 1-29-2004 canceled claims 2 to 24. The preliminary amendment filed 3-17-2004 canceled claim 1 and add new claims 25 to 32.

#### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/804,242, filed on 3-13-2001.

#### ***Information Disclosure Statement***

3. The references listed in the information disclosure statement submitted on 1-29-2004 and 4-20-2004 have been considered by the examiner (see attached PTO-1449).

#### ***Allowable Subject Matter***

4. Claims 25 to 32 are allowed.

5. The following is an examiner's statement of reasons for allowance: the prior art made of record teaches a method and an apparatus for generating and recording ECC data on a plurality of sectors. For instance, Noda et al. (USP 7003711 B2) teaches an information recording medium on which sector data generated from an ECC block is

recorded using a plurality of sectors. Noda also teaches that a PO data is arranged in the last row of an even sector and a PO data is arranged in a second row position from the end of an odd sector. However, the prior art made of record, taken alone or in combination fails to teach the novel element of the instant invention.

Specifically, the prior art made of record, taken alone or in combination fails to teach or fairly suggest or render obvious the claimed limitation of "generating a first outer parity block (PO-a) for each column of a third information data block, the third information data block being an aggregation of sectors of an even-numbered rows of the first information data block and sectors of odd-numbered rows of the second information data blocks."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelly A. Chase whose telephone number is 571-272-3816. The examiner can normally be reached on Mon-Thur from 8:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**SHELLY CHASE**  
**PRIMARY EXAMINER**

constructed. Here,  $(K \times Q)$  bytes or  $(K/2 \times Q)$  bytes error-correcting code (error-correcting word) PO-a is created with respect to  $(K \times M/2)$  bytes data on each column of the even-number row.

5           Next,  $(K \times Q)$  bytes or  $(K/2 \times Q)$  bytes error-correcting code (error-correcting word) PO-<sup>b</sup>~~a~~ is created with respect to  $(K \times M/2)$  bytes data on each column of the odd-number row.

10           PO-a and PO-b created here are scattered and located on each of  $(M \times N)$  bytes of K information data blocks are scattered and arranged.

15           Here, in the case of  $PO-a = PO-b = (K \times Q)$ , PO-a and PO-b are respectively scattered and arranged by Q on each of the  $(M \times N)$  bytes information data blocks while in the case of  $PO-a = PO-b = ((K/2) \times Q)$ , PO-a is scattered and arranged on the even-number-th information data blocks or the former half of the information data block out of K information data blocks and PO-b are scattered and arranged on the odd-number-  
20           th information data blocks or the latter half of the information data blocks.

25           Here, in the case where  $M = 12$  and  $N = 172$  are set in the same manner as the DVD standard of FIG. 1 according to the present invention, setting  $K = 32$  ( $16 \times 2$ ),  $Q = 1$  and  $PO-a = PO-b = 16$  leads to the creation of the error-correcting word PO-a for the even number and the error-correcting word PO-b for the odd

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